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NOTICE OF ALLOWANCE AND FEE(S) DUE

46169

7590

12/23/2010

SHOOK, HARDY & BACON L.L.P. (Cerner Corporation) Intellectual Property Department 2555 GRAND BOULEVARD KANSAS CITY, MO 64108-2613

| EXAMINER | | | | |
|-----------------|--------------|--|--|--|
| LAM, ELIZA ANNE | | | | |
| ART UNIT | PAPER NUMBER | | | |

3626

DATE MAILED: 12/23/2010

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/748,477 | 12/30/2003 | Kay L. Grasso | CRNI.107715 | 7079 |

TITLE OF INVENTION: COMPUTERIZED SYSTEM AND METHOD FOR GENERATING AN IMMUNIZATION SCHEDULE IN A HEALTHCARE

ENVIRONMENT

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO | \$1510 | \$300 | \$0 | \$1810 | 03/23/2011 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

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B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

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III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

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Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

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| appropriate. All further correspondence including the Patent, advance orders and notification indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new of maintenance fee notifications. CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) 46169 7590 12/23/2010 SHOOK, HARDY & BACON L.L.P. (Cerner Corporation) Intellectual Property Department | | | N Fe | ion of maintenance fees will be mailed to the current correspondence address as a correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must | | | |
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| 2555 GRAND E | BOULEVARD , MO 64108-2613 | | | | | | (Depositor's name) |
| KANSAS CITT | , 100 04100-2013 | | | | | | (Signature) |
| | | | L | | | | (Date) |
| APPLICATION NO. | FILING DATE | | FIRST NAMED INVENTO |)R | АТТО | RNEY DOCKET NO. | CONFIRMATION NO. |
| 10/748,477 | 12/30/2003 | • | Kay L. Grasso | | • | CRNI.107715 | 7079 |
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| LAM, ELI | ZA ANNE | 3626 | 705-002000 | _ | | | |
| "Fee Address" ind PTO/SB/47; Rev 03-(Number is required. 3. ASSIGNEE NAME A PLEASE NOTE: Un | ND RESIDENCE DATA less an assignee is ident h in 37 CFR 3.11. Comp | " Indication form aed. Use of a Customer A TO BE PRINTED ON | data will appear on the | tively, Igle firm (having as r agent) and the nan ttorneys or agents. If the perinted. Itype) patent. If an assign assignment. | a memb nes of u no nam | er a 2 p to lee is 3 | ocument has been filed for |
| Please check the appropriate. 4a. The following fee(s) Issue Fee Publication Fee (N | riate assignee category or | permitted) | b. Payment of Fee(s): (P) A check is enclosed Payment by credit of | ☐ Individual ☐ C lease first reapply a l. card. Form PTO-203 | orporation or previous of the state of the s | on or other private gro | ficiency, or credit any |
| 5. Change in Entity Sta | utus (from status indicated as SMALL ENTITY statu | d above) as. See 37 CFR 1.27. | ☐ b. Applicant is no le | | LL EN | ΓΙΤΥ status. See 37 CI | |
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| Authorized Signature | | | | Date | | | |
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| (Cerner Corporation | | | ART UNIT | PAPER NUMBER | |
| Intellectual Proper | ty Department | | 3626 | | |
| 2555 GRAND BOULEVARD | | | | | |
| KANSAS CITY, MO 64108-2613 | | DATE MAILED: 12/23/2010 | | | |

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1284 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1284 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

| | Application No. | Applicant(s) | |
|--|---|---|-----|
| | 10/7/0/477 | | |
| Notice of Allowability | 10/748,477 Examiner | GRASSO ET AL. Art Unit | |
| • | | | |
| | Eliza Lam | 3626 | |
| The MAILING DATE of this communication apportunity apportunity of the communication apportunity | (OR REMAINS) CLOSE or other appropriate con IGHTS. This application | O in this application. If not included numbers, If not included numbers, If not included in due course. | |
| 1. ☑ This communication is responsive to <u>9/28/2010</u> . | | | |
| 2. X The allowed claim(s) is/are 1-7,26-29,46 and 51-57. | | | |
| 3. | • , , | d) or (f). | |
| 2. Certified copies of the priority documents have | e been received in Applic | ation No | |
| 3. Copies of the certified copies of the priority do | cuments have been rece | ived in this national stage application from | the |
| International Bureau (PCT Rule 17.2(a)). | | | |
| * Certified copies not received: | | | |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. | | file a reply complying with the requiremen | ts |
| 4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which giv | | |)F |
| 5. CORRECTED DRAWINGS (as "replacement sheets") mus | st be submitted. | | |
| (a) I including changes required by the Notice of Draftspers | son's Patent Drawing Rev | view (PTO-948) attached | |
| 1) ☐ hereto or 2) ☐ to Paper No./Mail Date | | | |
| (b) ☐ including changes required by the attached Examiner' Paper No./Mail Date | s Amendment / Commen | t or in the Office action of | |
| Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t | | | |
| 6. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT | | | |
| | | | |
| Attachment(s) | 5 □ Nation o | f Informal Datant Application | |
| Notice of References Cited (PTO-892) D Notice of Draftperson's Patent Drawing Review (PTO-948) | | f Informal Patent Application v Summary (PTO-413), | |
| Information Disclosure Statements (PTO/SB/08), | Paper I | No./Mail Date Pr's Amendment/Comment | |
| Paper No./Mail Date | | | |
| 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material | | er's Statement of Reasons for Allowance | |
| | 9. 🔲 Other | | |
| /E. L./ | /Robert Mor | • | |
| Examiner, Art Unit 3626 | Supervisory | Patent Examiner, Art Unit 3626 | |
| | | | |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ashley Sturgeon on 12/10/10.

The application has been amended as follows:

1. (Previously Presented) A computer-implemented method in a computer system for preventing one or more immunizations from being administered to a person too early, the method comprising:

receiving from a clinician, utilizing a first computer process, a request for an immunization schedule for a person during a present clinical visit;

receiving from the clinician, utilizing a second computer process, an identification of an immunization to be administered to the person, wherein the identification of the immunization is input by the clinician during the present clinical visit with the person;

generating, utilizing a third computer process, a custom immunization schedule for the person, wherein the custom immunization schedule is based on at least one immunization administered to the person during at least one former clinical visit prior to the present clinical visit, the immunization identified from

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the input by the clinician to be administered to the person during the present clinical visit, and a standard schedule of recommended immunizations;

in response to receiving the identification of the immunization to be administered during the present clinical visit, determining, utilizing a fourth computer process, whether it is too soon to administer the immunization, wherein the determination whether it is too soon to administer the immunization is based on the custom immunization schedule for the person;

based on a determination that it is not too soon to administer the immunization, displaying a notification that is it safe to administer the immunization during the present clinical visit;

based on a determination that it is too soon to administer the immunization, displaying a warning that the immunization is being administered too soon; and

updating the custom immunization schedule for the person in response to receiving an input regarding the immunization to be administered during the present clinical visit,

wherein the first, second, third and fourth computer processes are executed utilizing one or more computing devices.

2. (Previously Presented) The method of claim 1, further comprising: upon determining that it is too soon to administer the immunization, determining it is still safe to administer the immunization.

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3. (Previously Presented) The method of claim 2, further comprising:

based on a determination that it is still safe to administer the immunization, outputting information that it is safe to administer the immunization.

4. (Previously Presented) The method of claim 2, further comprising: upon determining that it is too soon to administer the immunization, determining that it is not safe to administer the immunization; and

based on a determination that it is not safe to administer the immunization, outputting information that it is not safe to administer the immunization.

- (Original) The method of claim 1, further comprising:
 obtaining information regarding the safe timing of immunizations from a database.
- 6. (Original) The method of claim 5, further comprising:
 obtaining information from an electronic medical record of the person stored within a comprehensive healthcare system.
- 7. (Original) The method of claim 6, further comprising:

 utilizing the information from the electronic medical record of the person
 and the information regarding safe timing of immunizations to determine whether
 an immunization is being administered too soon.

8-25. (Canceled)

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26. (Previously Presented) A computer system including one or more

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computer-readable storage media having computer-executable modules stored thereon for

preventing one or more immunizations from being administered to a person too early, the

computer-executable modules comprising:

a receiving module for receiving from a clinician an identification of an

immunization to be administered to a person during a present clinical visit,

wherein the identification of the immunization is received from the clinician

during the present clinical visit;

a determining module for determining whether it is too soon to administer

the immunization in response to receiving the identification of the immunization

to be administered from the clinician during the present clinical visit, wherein

determining whether it is too soon to administer the immunization includes

accessing a custom immunization schedule for the person that was generated

based on at least one immunization administered to the person during at least one

former clinical visit prior to the present clinical visit, the immunization identified

from the input by the clinician to be administered to the person during the present

clinical visit, and a standard schedule of recommended immunizations;

a displaying module for displaying a warning that the immunization is

being administered too soon or a notification that the immunization may be

administered; and

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an updating module for updating the custom immunization schedule for the person in response to receiving an input regarding the immunization to be administered during the present clinical visit.

27. (Original) The system of claim 26, further comprising:

a second determining module for determining whether it is still safe to administer the immunization even though it is too soon to administer the immunization.

- 28. (Original) The system of claim 27, wherein if it is safe to administer the immunization, outputting information that it is safe to administer the immunization.
- 29. (Original) The system of claim 27, wherein if it is not safe to administer the immunization, outputting information that it is not safe to administer the immunization.

30-45. (Canceled)

46. (Previously Presented) A computer-storage medium having computer-executable instructions for performing a method for preventing one or more immunizations from being administered to a person too early, the method comprising:

receiving from a clinician, a request for an immunization schedule for a person during a present clinical visit;

receiving from the clinician an identification of an immunization to be administered to the person, wherein the identification of the immunization is input by the clinician during the present clinical visit with the person;

generating a custom immunization schedule for the person, wherein the custom immunization schedule is based on at least one immunization administered to the person during at least one former clinical visit prior to the present clinical visit, the immunization identified from the input by the clinician to be administered to the person during the present clinical visit, and a standard schedule of recommended immunizations;

in response to receiving the identification of the immunization to be administered to the person during the present clinical visit, determining whether it is too soon to administer the immunization during the present clinical visit based on the custom immunization schedule;

based on a determination that it is too soon to administer the immunization, determining whether it is safe to administer the immunization too soon:

upon determining that it is not safe to administer the immunization too soon, displaying a warning indicating that the immunization is not safe to administer to the person wherein the warning is a first popup warning window;

upon determining that it is safe to administer the immunization too soon, notifying the clinician that it is safe to administer the immunization too soon;

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based on a determination this it is not too soon to administer the immunization, determining whether the immunization will cause an adverse reaction to the person;

upon determining that the immunization will cause an adverse reaction, displaying a warning that the immunization will cause an adverse reaction via a second pop-up warning window;

upon determining that the immunization will not cause an adverse reaction, displaying a message that the immunization may be administered during the present clinical visit; and

updating the custom immunization schedule for the person in response to receiving an input regarding the immunization to be administered during the present clinical visit.

47-50. (Canceled)

51. (Currently Amended) The computer-readable storage medium of claim 46, further comprising:

obtaining healthcare information for the person from the person's electronic medical record.

52. (Currently Amended) The computer-readable storage medium of claim 46, further comprising:

obtaining information regarding adverse reactions and immunizations.

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53. (Currently Amended) The computer-readable storage medium of claim

52, further comprising:

comparing the information regarding adverse reactions to the information

for the person obtained from the person's electronic medical record.

54. (Currently Amended) The computer-readable storage medium of claim

53, wherein the information obtained from the person's electronic medical record includes

medications being taken.

55. (Currently Amended) The computer-readable storage medium of claim

53, wherein the information obtained from the person's electronic medical record includes

allergy information.

56. (Currently Amended) The computer-readable storage medium of claim

53, wherein the information obtained from the person's electronic medical record includes a

medical condition that can cause adverse reactions to the immunization.

57. (Currently Amended) The computer-readable storage medium of claim

53, wherein the information obtained from the person's electronic medical record includes a

genetic condition that predisposes the person to adverse reactions to the immunizations.

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Allowable Subject Matter

2. The following is an examiner's statement of reasons for allowance: The primary reasons for the allowance of claims 1-7, 26-29, 46, and 51-57 is the inclusion of the limitations in the claims, which are not found in the prior art references, of a computer implemented method, a computer system, and a computer storage medium that receives an identification of an immunization, generates a custom immunization schedule based on at least one immunization administered during at least one former visit, the immunization identified during the present visit, and a standard schedule, determining from the identified immunization if it is too soon to administer and either displaying a warning or notifying it is safe to administer, determining if the immunization will cause an adverse reaction and either displaying a warning or notifying it is safe to administer, and updating the schedule in response to an input regarding the immunization. This, along with further limitations set forth by the claims render the application allowable over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Eliza Lam whose telephone number is (571)270-7052. The

examiner can normally be reached on Monday through Friday 8 am - 4 pm Eastern Standard

Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Robert Morgan can be reached on 571-272-6773. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

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applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/E. L./

Examiner, Art Unit 3626

/Robert Morgan/

Supervisory Patent Examiner, Art Unit 3626